

What is claimed is:

1. An adjuvant composition comprising EDTA or an agriculturally acceptable salt thereof and a quaternary ammonium salt.
2. The adjuvant composition of claim 1, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.
3. The adjuvant composition of claim 1, further comprising cocodimethyl amine or cocodimethyl ammonium chloride.
4. The adjuvant composition of claim 1, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.
5. The adjuvant composition of claim 1, further comprising an active agent.
6. The adjuvant composition of claim 1, wherein the EDTA is present at a concentration of at least 5% by weight of the adjuvant composition.
7. The adjuvant composition of claim 1, wherein the EDTA is present at a concentration of at least 10% by weight of the adjuvant composition.
8. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the adjuvant composition set forth in claim 1 to a site that will benefit from the treatment with the agricultural chemical.
9. A solid adjuvant composition comprising between about 10 and about 98% by weight oxalic acid, between about 1 and about 89% by weight citric acid, and between about 0.1 and about 5 percent by weight of a flow agent.
10. The adjuvant of claim 9, wherein the flow agent is a kaolin claim or a silica gel.
11. The adjuvant of claim 9, further comprising a quaternary ammonium salt.

12. The adjuvant of claim 11, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

13. The adjuvant composition of claim 9, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

14. The adjuvant composition of claim 9, further comprising an active agent.

15. The adjuvant composition of claim 9, wherein the EDTA is present at a concentration of at least 5% by weight of the adjuvant composition.

16. The adjuvant composition of claim 9, wherein the EDTA is present at a concentration of at least 10% by weight of the adjuvant composition.

17. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 9 to a site that will benefit from the treatment with the agricultural chemical.

18. A liquid adjuvant composition comprising between about 2 and about 16% by weight oxalic acid, between about 2 and about 50% by weight citric acid, and corresponding molar amounts of agriculturally acceptable salts thereof, with the remainder being water or an aqueous solution of a water-miscible solvent.

19. The adjuvant composition of claim 18, further comprising a quaternary ammonium salt.

20. The adjuvant of claim 18, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

21. The adjuvant composition of claim 18, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

22. The adjuvant composition of claim 18, further comprising an active agent.

23. The adjuvant composition of claim 18, wherein the EDTA is present at a concentration of at least 5% by weight of the adjuvant composition.

24. The adjuvant composition of claim 18, wherein the citric and/or oxalic acid are present at a concentration of at least 5% by weight of the adjuvant composition.

25. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 18 to a site that will benefit from the treatment with the agricultural chemical.

26. A liquid adjuvant composition comprising between about 2 and about 16% by weight oxalic acid, between about 2 and about 50% by weight citric acid, between about 2 and 20 % by weight of EDTA, and corresponding molar amounts of agriculturally acceptable salts of any of these three, with the remainder being water or an aqueous solution of a water-miscible solvent.

27. The adjuvant composition of claim 26, further comprising a quaternary ammonium salt.

28. The adjuvant composition of claim 27, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

29. The adjuvant composition of claim 26, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

30. The adjuvant composition of claim 26, further comprising an active agent.
31. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 26 to a site that will benefit from the treatment with the agricultural chemical.
32. An aqueous solution or suspension comprising:
- a) a calcium and/or magnesium salt present in an amount between about 2% by weight and the solubility limit of the salt, and
 - b) an active agent in solution or in suspension.
33. The aqueous solution or suspension of claim 32, further comprising a quaternary ammonium salt.
34. The aqueous solution or suspension of claim 33, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.
35. The aqueous solution or suspension of claim 33, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.
36. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 32 to a site that will benefit from the treatment with the agricultural chemical.
37. The aqueous solution or suspension of claim 32, wherein the active component is a pesticide.
38. The aqueous solution or suspension of claim 32, wherein the active component is a plant growth regulator.

39. A composition comprising:

- a) a chelating agent and
- b) an insecticide, virucide, acaricide or fungicide.

40. The composition of claim 39, wherein the chelating agent is selected from the group consisting of EDTA, citric acid, oxalic acid, agriculturally acceptable salts thereof and mixtures thereof.

41. The composition of claim 39, further comprising a quaternary ammonium salt.

42. The composition of claim 40, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

43. The composition of claim 39, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

44. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 39 to a site that will benefit from the treatment with the agricultural chemical.

45. A composition comprising:

- a) a chelating agent and
- b) a plant growth regulator, wood treatment, or paint composition.

46. The composition of claim 45, wherein the chelating agent is selected from the group consisting of EDTA, citric acid, oxalic acid, agriculturally acceptable salts thereof and mixtures thereof.

47. The composition of claim 45, further comprising a quaternary ammonium salt.

48. The composition of claim 46, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

49. The composition of claim 45, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

50. A method for enhancing the efficacy of agricultural chemicals, which comprises applying the composition set forth in claim 45 to a site that will benefit from the treatment with the plant growth regulator, wood treatment or paint composition.

51. A composition comprising:

- a) a burn-down herbicide and
- b) EDTA and/or
- c) a mixture of citric and oxalic acid.

52. The composition of claim 51, wherein the burn-down herbicide is selected from the group consisting of dipyrldyl and organic phosphorous-based herbicides.

53. The composition of claim 51, wherein the chelating agent is selected from the group consisting of EDTA, citric acid, oxalic acid, agriculturally acceptable salts thereof and mixtures thereof.

54. The composition of claim 51, further comprising a quaternary ammonium salt.

55. The composition of claim 54, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

56. The composition of claim 51, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

57. The composition of claim 51, wherein the EDTA or mixture of oxalic and citric acid is present at a concentration of at least 5% by weight of the composition.

58. The composition of claim 51, wherein the EDTA or mixture of oxalic and citric acid is present at a concentration of at least 10% by weight of the composition.

59. A composition comprising:

- a) a post emergence herbicide and
- b) EDTA and/or agriculturally acceptable salts thereof, and/or
- c) a mixture of citric and oxalic acid.

60. The composition of claim 59, wherein the post emergence herbicide is selected from the group consisting of sulfonyl ureas, acid-amide based herbicides, urea-based herbicides, diazine or triazine-based herbicides, and nitrile-based herbicides.

61. The composition of claim 59, further comprising a quaternary ammonium salt.

62. The composition of claim 61, wherein the quaternary ammonium salt is selected from the group consisting of quaternized long-chain amines and quaternized polyoxyalkylenated long-chain amines, where a long chain is between 8 and 30 carbon and/or oxygen atoms in length.

63. The composition of claim 59, further comprising one or more additional components selected from the group consisting of polyhydric alcohols, polyphosphate salts, cationic compounds and anionic compounds.

64. The composition of claim 59, wherein the EDTA or mixture of oxalic and citric acid is present at a concentration of at least 5% by weight of the composition.

65. The composition of claim 59, wherein the EDTA or mixture of oxalic and citric acid is present at a concentration of at least 10% by weight of the composition.